

U.S. Patent Application Serial No. 10/561,963
Response to OA dated February 20, 2009

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AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claim 1 (Cancel).

Claim 2 (Cancel)

Claims 3-8 (Canceled)

Claim 9 (Currently Amended): A scroll compressor in which a scroll fixed lap rising from a fixed plate of a fixed scroll and a scroll orbiting lap rising from an orbiting plate of an orbiting scroll are combined with each other to form compression chambers therebetween, a plate back surface of said orbiting scroll is provided with a back pressure space, said back pressure space is divided into an inner region and an outer region by a seal ring, high pressure is applied to said inner region of said seal ring, pressure which is lower than that applied to said inner region is applied to said outer region, thereby bringing said orbiting scroll into contact with said fixed scroll, a rotation-resistant part restrains said orbiting scroll from rotating, said orbiting scroll is allowed to orbit, thereby moving said compression chamber toward a center of scroll while reducing volume of said compression chamber, refrigerant gas is sucked into said compression chamber and compressed,

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wherein

said fixed scroll is made of iron-based material, said orbiting scroll is made of aluminum-based material, only said plate back surface of said orbiting scroll is subjected to surface processing to form a hardened layer, and

said sliding portion between said plate back surface and said seal ring is masked and subjected to the surface processing, so as to provide reduced friction between the seal ring and the plate back surface, thereby not forming said hardened layer on the sliding portion between said back plate surface and said seal ring.

Claim 10 (Previously Presented): The scroll compressor according to claim 9, wherein any of alumite coating processing, PVD processing and nickel phosphorus plating processing is carried out as the surface processing.

Claim 11 (Currently Amended): A scroll compressor in which a scroll fixed lap rising from a fixed plate of a fixed scroll and a scroll orbiting lap rising from an orbiting plate of an orbiting scroll are combined with each other to form compression chambers therebetween, a plate back surface of said orbiting scroll is provided with a back pressure space, said back pressure space is divided into an inner region and an outer region by a seal ring, high pressure is applied to said inner region of said seal ring, pressure which is lower than that applied to said inner region is applied to said outer region, thereby bringing said orbiting scroll into contact with said fixed scroll, a rotation-

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resistant part restrains said orbiting scroll from rotating, said orbiting scroll is allowed to orbit, thereby moving said compression chamber toward a center of scroll while reducing volume of said compression chamber, refrigerant gas is sucked into said compression chamber and compressed, wherein

said fixed scroll is made of iron-based material, said orbiting scroll is made of aluminum-based material, only said plate back surface of said orbiting scroll is subjected to surface processing to form a hardened layer, and

said hardened layer formed by the surface processing of said sliding portion between said plate back surface and said seal ring is removed by working, so as to provide reduced friction between the seal ring and the plate back surface.

Claim 12 (Previously Presented): The scroll compressor according to claim 11, wherein any of alumite coating processing, PVD processing and nickel phosphorus plating processing is carried out as the surface processing.